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Baggenstoss

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(54) **CLASS SPECIFIC CLASSIFIER**

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(57) **ABSTRACT**

Accordingly there is provided a class specific classifier for classifying data received from a data source. The classifier has a feature transformation section associated with each class of data which receives the data and provides a feature set for the associated data class. Each feature transformation section is joined to a pattern matching processor which receives the associated data class feature set. The pattern matching processors calculate likelihood functions for the associated data class. One normalization processor is joined in parallel with each pattern matching processor for calculating an inverse likelihood function from the data, the associated class feature set and a common data class set. The common data class set can be either calculated in a common data class calculator or incorporated in the normalization calculation. The inverse likelihood function is then multiplied with the likelihood function for each associated data class. A comparator provides a signal indicating the appropriate class for the input data based upon the highest multiplied result.

14 Claims, 2 Drawing Sheets

